End of Execution Phase Checklist Instructions

A checklist of activities and deliverables that should be referred to in planning the Execution Phase and completed by the end of the Execution Phase. This checklist can be used during an end-of-phase management review. This is one of a series of end-of-phase checklists, one for each of our representative project phases.

The theme of an end-of-phase management review is to ensure that sufficient work has been completed in the current project phase to allow the project to enter the next phase without an unacceptable increase in project risk. Thus the checklist is not only for what work was done in last phase but also for what foundation has been set for the work that is coming next. Projects that don't lay a good foundation in risk reduction activities, such as planning, requirements management, design and testing, can become overextended in later project phases, increasing the schedule time, cost and risk of the project, and decreasing the fitness for use of the project's result. A checklist that tracks the status of key activities and deliverables in each project phase can help the team and stakeholders decide if a sufficient foundation has been laid in the current project phase to allow the project to continue into the next phase.

The Execution Phase (or "Development Phase") is where the requirements from the Initiation Phase are developed into the eventual project deliverable (products, systems, etc.) Once this phase is done, this overall project deliverable has been created and shown to work and meet the requirements and the project business case. Only then is it ready for full approval from a customer viewpoint, and final preparations for its eventual release to customers, in the upcoming Approval Phase.

1. If you are at the beginning of your project, download this checklist and the other end-of-phase checklists and use them to make the general plan for the entire project. If you are in mid-project, examine the checklists of previous phases to ensure that your project is not already overextended. Try to avoid examining these end-of-phase checklists late in the project phase or on the eve of the end-of-phase project review -- they lose much of their value as a planning tool if they are not used early.

2. Don't be put off by the number of items on these checklists. They are illustrative of the areas of focus, with example checklist items underneath, for accomplishing the key goals of the phase. Edit these checklists to remove items that don't apply to your particular project and to include additional items that are key gating items in your organization's development or project process. You can also adapt these checklists to your organization's project lifecycle phases -- more on that below. Try to do this editing EARLY in your planning, when you're not under pressure to complete a particular phase. Then hold the

checklist steady both during and at the end of the phase -- resist making changes and removing items in order to have a better review.

3. Start actively using each checklist EARLY in the project phase to ensure completeness of the activities and deliverables that you are trying to accomplish during the phase.

4. As part of the end-of-phase review, the checklist should be prepared with either a “YES” or “NO” in the “Done?” column. Items with a “NO” are “punch list” items to be tracked until completion.

The Use of Project Phases

Projects are typically divided into Phases that define logical divisions of the project work over time. Phases also provide the team and management with checkpoints for reviewing project progress and parameters, and determining whether to go further.

The project phase breakdown and names that we use are fairly typical, but by no means the only ones. If your project phases are broken up differently, you can adapt our end-of-phase checklists to your own development or project lifecycle methodology. For example, product development organizations might split the “Execution” phase into two distinct phases of “Design” and “Prototype and Test”. Organizations with complex manufacturing may want to have two phases for “Delivery”. Other industries may have completely different phases. The point here is that a project lifecycle should have periodic progress reviews where the work to date is examined and the risk of continuing with the project is assessed. Our end-of-phase checklists are meant to support these reviews.

To guide your use of this checklist and its possible adaptation to your own development model, the next section provides our definition of the Execution Phase.

Execution Phase

During the Execution Phase a solution is developed for the problem embodied in the project's requirements. In product and system development, a design is created that converges on a solidifying set of detailed requirements for each component. This convergence is measured by prototypes, testing and reviews. As the Execution Phase progresses, groups across the organization become more deeply involved in planning for final testing, production and support. The following major sets of activities are typical:

- **Project Objectives, Specifications and Development Work:** Detailed specifications ensure the Vision and Functional requirements get translated through to design documents the development team uses to prototype elements of the project deliverable.

- **Reviews and Development Testing:** Reviews of written specifications and prototypes highlight deficiencies, deviations and missing functionality in the

design and help determine if the design matches the Vision requirements. Development testing is done as components are prototyped, sometimes in successive iterations that create groups of features. System integration pulls the new technical elements together into a system or integrates a new feature into the existing system.

- **Ongoing Planning:** Includes other cross-functional groups doing more detailed preparation for their own activities as the project deliverable comes into being. Test groups prepare for testing activities. Manufacturing and Operations are increasingly busy during this phase getting prepared for their work to deploy the new product or system to the field. Documentation groups start writing in earnest. Marketing begins more detailed launch planning. User or customer support groups work on their processes and tools.

- **Tracking and Status** activities are critical to ensuring the work is proceeding to plan or deviations are seen quickly and handled by the team.

By the end of this phase, the main project deliverables have been created and tested, and shown to meet the Project Vision, functionality and design objectives. Support groups are ready for their part in Approval Phase activities and the system or product is now ready for approval testing and reviews in the next phase.

Management and the team review the results of the Execution Phase and approve the transition to full Approval Phase activities.

Using the Execution Phase Checklist

As we stated in the Introduction, the purpose of an end-of-phase checklist (and accompanying management review) is to ensure that sufficient work has been completed in the current project phase to allow the project to enter the next phase without an unacceptable increase in project risk. Thus the checklist is not only for what work was done in this phase, but also for what foundation has been set for the work that is coming next. Projects that don't lay a good foundation in risk reduction activities such as planning, requirements management, design and testing can become overextended in later project phases, increasing the schedule time, cost and risk of the project, and decreasing the fitness for use of the project's result. A checklist that tracks the status of key activities and deliverables in each project phase can help the team and stakeholders decide if a sufficient foundation has been laid in the current project phase to allow the project to continue into the next phase.

The contents of the Execution Phase Checklist help ensure that sound, thorough design work is done and adequately reviewed, and adequate basic testing done before this 'creation' phase is called complete. It also ensures that other cross-functional groups have done adequate planning and preparation for the upcoming Approval Phase and the ultimate release to customers.

A caveat regarding the use of end-of-phase reviews and checklists in general: In some cases, all activities and deliverables may NOT be completed at the end of a project

phase. The goal of a gating end-of-phase management review is not to rigidly enforce a waterfall development methodology where everything must be completed, approved and signed off before any activities in the next phase can begin. There can be overlap between phases and as much concurrency as possible without exposing the project to unacceptable risk. The point of the gating review is to examine the state of the current phase's activities and deliverables and measure the risk of overextending the project by moving the center of effort of project activities heavily into the next phase at this point in time.

The critical aspects of transitioning from the Execution Phase into the Approval Phase are:

- Ensuring the project deliverable (product, system, etc.) has reached a basic functioning level. The purpose of the upcoming Approval Phase is to test from a customer or user point of view. To do this testing, the system must basically work when it hits the Approval Phase.

- Ensuring that the project deliverable, as implemented, still meets the key parameters of the business case, i.e., do the costs associated with the implementation still meet the economic parameters set in the Initiation Phase? Have all the critical customer features been implemented successfully?

If there *is* an Execution Phase activity or deliverable that has not been completed by the end-of-project review, the team and stakeholders may make a consensus decision that there is no severe risk in allowing the project to continue into the next phase as long as the activity or deliverable is completed in a timely way and scheduled to be completed before its absence would raise risk.

If this case can be made for the item, then enter a "NO" in the "Done?" column and enter the item's completion date in the "Due Date" column. This activity or deliverable is now considered to be on the "punch list", a to-do list of activities that the project manager recognizes as exceptional -- a carefully controlled overextension of the project. These items must be carefully tracked to closure before the end-of-phase review can be considered fully complete. The project manager takes an action item from the end-of-phase review to track each item on the punch list and report the closure of each item. One mechanism for doing this is to amend the review minutes as each punch list item is closed out. Progress on the punch list should be reported regularly and frequently. The review is not considered complete until the punch list has been cleared.

End of Execution Phase Checklist

Add your own explicit items or wording as needed. This particular list shows the kinds of items that can be checked for hardware/software development projects. You can edit this list to refer to specific project documents or key activities involved in reviewing project deliverables prior to transitioning to the more customer-centric reviews and near-final testing to be done during the Approval Phase.

Administrative Information

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